Adopted
March 15, 2001
by the
MICHIGAN AERONAUTICS COMMISSION

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This ***Policy Plan For Michigan Air Service*** may be viewed through the Internet at the MDOT website: **http://www.mdot.state.mi.us/aero/**

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POLICY PLAN FOR MICHIGAN AIR SERVICE

March 2001

MICHIGAN DEPARTMENT OF TRANSPORTATION

STEERING COMMITTEE

MDOT established a steering committee, representing 13 organizations, to assist in the development of the ***Policy Plan for Michigan Air Service.*** The Steering Committee members came from a wide variety of statewide and national organizations representing Michigan air service interests.

The PPMAS Steering Committee, meeting monthly, provided valuable input and direction throughout the plan development effort. The depth and breadth of experience and diverse perspectives assembled on the steering committee has resulted in a product that will be useful in directing limited staff and financial resources effectively. The PPMAS was endorsed by the steering committee for submittal to the Michigan Aeronautics Commission. The Michigan Aeronautics Commission adopted the PPMAS on March 15, 2001.

Co-sponsors of the PPMAS study effort were the Deputy Director for the Bureau of Aeronautics, Bill Gehman, and the Deputy Director for the Bureau of Transportation Planning, Lou Lambert.

Supporting the steering committee and the overall study effort was a group of talented professionals from the Bureau of Transportation Planning and Bureau of Aeronautics. These individuals included . . .

- From the Bureau of Aeronautics: Gerry Edwards, Matt Brinker, Pat Moynahan, Ralph Sims, Leanne Hengesbach, John Pierce, and Ken Schaschl for graphic design and publication layout.
- From the Bureau of Transportation Planning: Terry Gotts, Cory Johnson, Paul Kivela, Larry Karnes, Bob Kuehne, Polly Kent, and Laura Nelhiebel.

Policy Plan for Michigan Air Service
Steering Committee

Michigan Department of Transportation - Co-Chairs
Steve Vertalka - Transportation Planning
Pauline Misjak - Aeronautics
Michigan Aeronautics Commission
Air Carrier Airports Committee
Fred Rakunas - Chair
Guy Gordon
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American Association of Airport Executives
Jim Koslosky, Phil Johnson
American Society of Travel Agents
Penny Hawkins
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Harvey Setter
Michigan Association of Counties
Scott Dzurka, Aaron Hopper
Michigan Association of Regions
Jim Stingle, Jon Coleman
Michigan Economic Development Corporation
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Michigan Municipal League
Duane Ellis
Regional Airline Association
Gary Birkholz
Small Business Association of Michigan
Barry Cargill
State of Michigan Travel Program
Pam Haarer-Mitchell, Nicole Noll

Muskegon, Muskegon County Airport

EXECUTIVE SUMMARY

Why develop a ***Policy Plan for Michigan Air Service*** ?

Recognizing that air service affects local economies, demographics, and business locations, the Policy Plan for Michigan Air Service (PPMAS) defines the public role in this highly-visible form of public transportation operated by the private sector for profit.

Policy Plan Development Considerations:

- Assure the appropriate distribution of air service to support and promote economic development statewide.
- Assure the appropriate distribution of air service to support quality of life for Michigan residents and visitors by providing access to the national air transportation system.
- Match a community's air service to the level which it can profitably support.

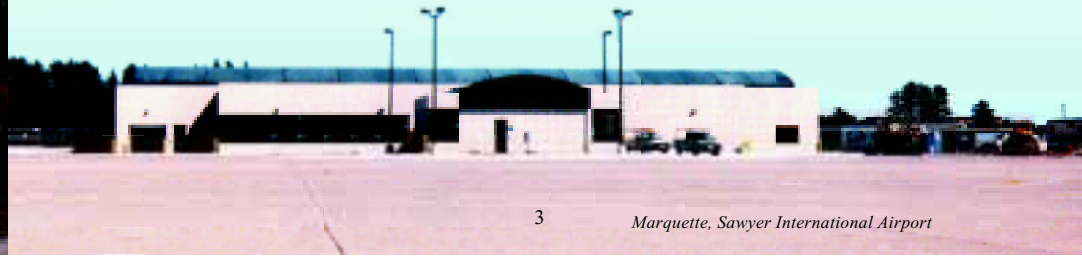
The PPMAS identifies those areas where the Michigan Department of Transportation (MDOT) has an opportunity to positively affect the provision and use of air services throughout Michigan.

PPMAS, adopted by the Michigan Aeronautics Commission in March 2001, will be used by MDOT to modify the Air Service Program as appropriate. The policy plan sets the stage for identifying and implementing those initiatives that will further enhance the availability and use of air services throughout Michigan. Policy plan goals addressing transportation services coordination, land use coordination, basic mobility, preservation, intermodalism, environment and aesthetics, strengthening the State's economy, and safety are presented in this report.

As an outcome of the PPMAS process, three overall policies have been established. These are . . .

- The 18 Michigan airports with scheduled air service are geographically well situated and meet Michigan Service Needs within the service threshold of 60 minutes or less surface travel time without the need to add additional airports. This will be monitored to assure that needed future demand at individual airports is reasonably accommodated.
- Although the 18 Michigan airports with scheduled air service are geographically well situated and meet Michigan Service Needs, some airports have deficiencies in meeting the policy plan consideration of matching the community's air service to the level which it can profitably support. Therefore, steps will be taken through the Michigan Air Service Program and other appropriate sources to retain and/or improve quality air service at selected, existing airports to meet specific travel demands integral to business, tourism/convention, population center, and general population access needs.
- To continue to meet PPMAS goals, scheduled air service at the 18 Michigan air service airports should be retained, working within available resources.

The PPMAS process utilized a team representing a wide variety of statewide and national organizations with an interest in Michigan air service. The steering committee identified air service issues from different perspectives, including airlines, airports, regulatory, and service needs. These were further examined from a customer's perspective by utilizing results from a 2000 airline passenger survey conducted at Michigan airports. The blending of these various perspectives resulted in the policy plan goals identified in the PPMAS report. These goals are aligned with MDOT's State Long Range Plan, a policy-oriented document which guides transportation investment decisions and strategies through the year 2025.



Marquette, Sawyer International Airport

AIR SERVICE BACKGROUND

After deregulation of the airline industry in the late 1970s, Michigan air service has, for the most part, flourished. Similar to other medium and large airports throughout the nation, average fares (adjusted for inflation) have plummeted while service options and destinations continue to multiply. Point-to-point service has given way to the "hub-and-spoke" system which typically provides travelers one or two-stop service to any destination worldwide.

In 2000, Michigan's air carrier airports served over 39 million total passengers on scheduled air carrier aircraft. At these airports, approximately 6,000 weekly flight departures took place during the same time frame. In addition, as emphasized by exports in excess of $30 billion, the state's commerce has become highly dependant on its high-quality air transportation system. The appendix presents airport service descriptions for each of the state's air carrier airports.

Michigan's air carrier airports vary greatly when measured by both the number of passengers served and the number of weekly flights. The largest air carrier airport, Detroit Metropolitan Wayne County International Airport (DTW), serves over 34 million passengers annually with approximately 4,300 weekly flights to a multitude of domestic and international destinations. In contrast, some of Michigan's smaller air carrier airports have as few as 12 weekly flights, typically with much smaller aircraft. Airports at both extremes present MDOT with unique challenges ranging from capacity constraints and competition issues at the larger facilities to subsidy dependence and extreme service sensitivity at smaller airports.


A Boeing 737 jet

Despite its success, airline deregulation has presented drawbacks. This is typified by the struggling Essential Air Service (EAS) Program which was established to preserve commercial service to smaller communities in the post-deregulation era. With limited funding and accountability mechanisms, the EAS program only provides minimal service in some cases. As a result, passenger ridership has been limited at some of Michigan's smaller EAS airports and federal subsidy continues to be necessary under the program. Adding urgency to the situation, Michigan, with its two peninsulas, is particularly dependent on air service as the state is removed from the nation's primary east/west highway corridors. Therefore, quality air service is essential to ensure economic growth and prosperity.

INDUSTRY DYNAMICS

The PPMAS Steering Committee examined industry dynamics from four basic perspectives: the airline system, airports, regulatory environment, and Michigan service needs. Each of these perspectives were represented on the PPMAS Steering Committee.

AIRLINE SYSTEM

Four basic areas were examined by the PPMAS steering committee as they relate to industry dynamics for the airline system: fleet evolution, consolidation, quality of service, and consumer preferences. The following discussion examines each of these.

AIRLINE SYSTEM
Fleet Evolution
Consolidation
Quality of Service
Consumer Preferences

Fleet Evolution

During the past five years airlines have increasingly added regional jets to their fleets. These new aircraft typically have a seating capacity of 35-70 seats. As this evolution continues, smaller 19-30 seat turboprop aircraft may be eliminated from the domestic airline fleet. This may have a negative impact on service for smaller communities in Michigan. Regional jets are more costly to operate than turboprop aircraft, and it is unlikely that smaller communities in Michigan will see service from this type of aircraft. As the turboprops are phased out, service may be reduced or eliminated at some Michigan communities.

Consolidation

Several major domestic airlines are examining the benefits of merging with other carriers. The current airline system consists of few operators, best being described in economic terms as an oligopoly. Consolidation, or merging of airlines (in the short term), may have a negative impact on Michigan. With fewer airlines to provide service there may be less competition in specific markets. This may lead to higher fares and possibly less service. Additionally, there will be less code sharing opportunities for regional airlines should further consolidation continue.

Quality of Service

Service "quality" from a consumer standpoint involves the following items:

- Hub Access - This relates to which hubs are served for the best possible connections. Hubs are predominately served by one or two major carriers offering numerous daily fights to many destinations. To take advantage of hub services, non-hub airports need to have well-timed service to these hub airports provided by the predominant hub carrier or its regional airline affiliate.
- Reliability - Most airlines have 90 percent or better reliability in terms of flight completion to the airports they serve. Anything less than this may indicate systemic problems and reduced consumer confidence. Currently, pilot shortages are contributing to reduced reliability.
- Frequency - Most airlines consider three flights per day minimum service. Frequencies of less than three per day is not conducive for the business traveler looking to complete a trip in one day and can lead to excessive travel time for passengers.
- Timing of Flights - Timing of flights is important for connections at hub airports. Properly timed flights allow passengers to arrive at hub airports to catch departing "banks" of flights. Ill timed flights will increase wait time at the hub, or compel passengers to remain overnight to complete travel the next day.
- Capacity - Service from some Michigan air service communities are shared with services from other communities. Occasionally, passenger demand at one community may fill all or most of the seats, reducing the available remaining capacity at the other community sharing the flight. Also, communities having dedicated aircraft may experience inadequate capacity due to excess passenger demand and desirable flight timing. Currently, capacity is constrained at specific airports due to limited availability of aircraft suitable to the market area size and overall fleet management efforts.

Consumer Preferences

- Aircraft Type - Most passengers differentiate between a jet aircraft or turboprop aircraft. Many airlines have responded to consumer preference and have gone to an all jet fleet. This preference toward jet aircraft may impact Michigan's air service in that many markets may not be able to support the more costly operation of regional jets.
- Frequent Flyer Programs - These programs may contribute to passenger leakage to other airports if brand loyalty is high. Passengers may be willing to drive further to an alternate airport if the carrier of preference is located at that airport. It is unclear to what extent these programs impact Michigan's air service.

AIRPORTS

There were four basic areas examined by the PPMAS Steering Committee as they relate to industry dynamics for airports: service areas, airport suitability, market profitability, and additional commercial service airports. The following discussion examines each of these.

AIRPORTS
Service Areas
Airport Suitability
Market Profitability
Additional Airports

Service Areas

An airport service area is defined as the geographical area from which the airport draws the vast majority of its passengers. Airport location and the quality of air service are the main determinants of the size of an airport's geographical service area. Assuming suitable surface access exists, proximity to population centers and other air carrier airports will be a major factor in determining air service demand. Another important factor, quality of service, is best characterized by the number of flights per day, aircraft operated (i.e. regional jet vs. turboprop), availability of reasonable air fares, air carrier reliability, and nonstop service to hub airports. Airport service areas often overlap.

Airport Suitability

The suitability of an airport for air carrier service is measured not only by operational capability, such as all-weather access, but also by infrastructure considerations such as terminal suitability, adequate parking, and Americans with Disabilities Act (ADA) compliance. For an air carrier airport to prosper, adequate surface access is crucial. Furthermore, an airport (and its air service providers) will benefit if its terminal facilities, including on-site passenger airport parking, are modern, convenient, and of appropriate capacity.

Market Profitability

Because airlines are for-profit corporations, the ability of a community to support air service is critical for these services to continue and/or expand. Business travelers generate more consistent usage with a higher revenue yield than discretionary travelers. Consequently, airlines are concerned with more than just the total number of passengers. Overall profitability of a particular service, compared to alternative services, is paramount and will determine where an airline will operate. Market forces determine whether service at a large airport continues, expands, or decreases based on the community's ability to profitably support these services.

High quality air service increases the attraction of a large airport and may draw travelers away from smaller, local airports. At smaller airports, a result may be the dependence of the local community on federal subsidy and service guarantees under the Essential Air Service Program in order to receive continued service. Therefore, local community support for air service is essential for the economic success of the air carrier(s) and self-sufficiency of the airport.

Charter Services

It should be recognized that charter services can respond to business and tourism/convention travel needs that cannot be profitably serviced by scheduled air carriers. Charter services are offered at many airports regardless of whether scheduled air service is available.

Additional Commercial Service Airports

In cases where demand appears to justify establishment of additional commercial service airports, particular consideration shall be given to the potential impact on regional, state, and national air service. Although the cost of establishing new air service airports may initially appear justifiable, the decision must be considered against the wider scope of regional, state, and national service as the negative impacts may outweigh the potential benefits. The same consideration must be given when establishing air service at existing airports. While it may be financially feasible, it may also reduce the overall quality of the regional air service. For example, if an airline uses its limited resources to provide service at two airports within a region instead of one, service at each airport may be inferior in terms of frequency, aircraft type, and timing when compared to a single airport scenario.

REGULATORY ENVIRONMENT

The airline industry was deregulated in 1978, eliminating federal approval of certain parts of the airline application process, including specific routes to be operated, markets served, and fares charged. Today, many federal laws and regulations exist focusing on safety of airline/airport operations and airline passengers. Federal, state and local agencies have a shared interest in developing and maintaining a safe, efficient aviation system which enables the airline industry to provide air passenger services meeting business and discretionary travel needs.

State and local laws and regulations may not adequately protect the airport from encroaching development. This hinders air service growth and may impose increased costs to comply with new requirements. Passing costs on to airlines serving the community may render the service uneconomical, hence threatening its continuation, or result in increased fares, which may make the service unaffordable. In either situation, the community faces loss of air transportation and its nearby link to the national air transportation system. Proposed laws and regulations should consider the benefits to aviation safety as well as the potential impact upon scheduled air services needed by the community.

MICHIGAN SERVICE NEEDS

Michigan service needs were assessed within the framework established by the ***Michigan Airport System Plan*** (MASP) as adopted by the Michigan Aeronautics Commission and accepted by the State Transportation Commission in 2000. The MASP identified a series of system goals as they relate to business centers, tourism/convention centers, population centers and general population.

As in the MASP, the analytical tool used in PPMAS was the Statewide Travel Demand Model. This model divides the state into 2,307 Transportation Analysis Zones (TAZ), each generally a township or smaller in size. Each zone has a variety of socio-economic data assigned to it including current and forecasted population, employment, etc. Each TAZ is connected to all other zones using the highway network with appropriate speeds and travel times. This permitted analysis of travel time between all zones, and from zones to each airport.

The PPMAS Steering Committee assessed service needs relative to three basic elements — surface travel time, airport category, and service threshold. The ***surface travel time*** standard was established at 60 minutes. This figure was determined to be reasonable when establishing basic airport service areas. ***Airport category*** took into consideration the total number of flights each week from an airport to a hub airport. Airports were assigned to each category based on the number of flights as follows . . .

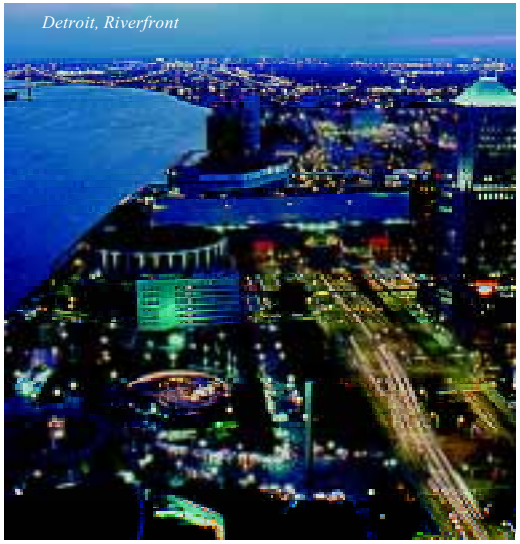
Category	Weekly Flights	No. of Airports	Airports
1	100+	7	Detroit Metro Flint Grand Rapids Kalamazoo Lansing Saginaw Traverse City
2	25-99	6	Detroit City Escanaba Houghton/Hancock Marquette Muskegon Pellston
3	<25	5	Alpena Iron Mountain Ironwood Manistee Sault Ste Marie

Service thresholds were established at 95 percent for each of the service needs goals. This means that for each of the service needs goals, 95 percent of business centers, tourism/convention centers, population centers, and general population should be served by scheduled air service airports. Other alternatives were examined by the steering committee. The alternative accepted prescribed a 95 percent service threshold within a 60-minute service area for each of the service needs goals.

Serve Significant Business Centers

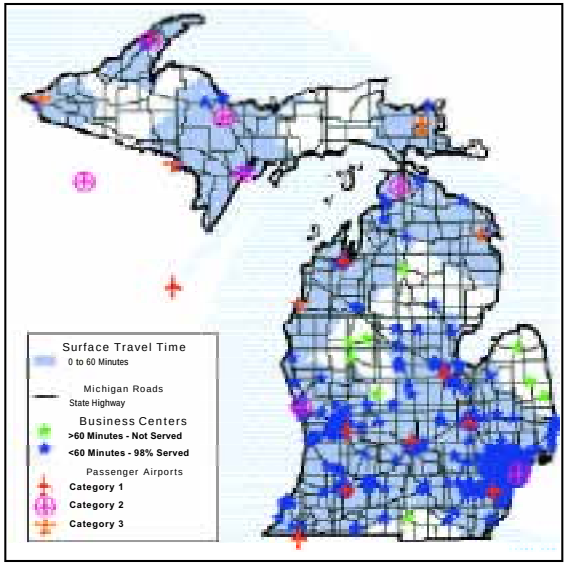
Goal: Assure the appropriate distribution of air service to support and promote economic development statewide.

Background: Business centers in Michigan are defined as a Transportation Analysis Zone (TAZ) with 3,000 or more employees. There are forecasted to be 450 such zones in the year 2020 with 95 of them having 10,000 or more employees. These zones are concentrated in or near the state's major metropolitan areas. A number of zones are also located in or near many of Michigan's smaller communities.


Detroit, Riverfront

Service Standards: Business center standards relate to proximity of an airport with scheduled air service to a business center and the service threshold.

The Statewide Travel Demand Model is the analytical tool used to determine the proximity of airports with scheduled air service to business centers. This tool was used to determine the service area coverage of the airports and the number and size of business centers served. In summary, business centers in Michigan should be served within 60 minutes surface travel time by an airport with scheduled air service.



Goal Achievement Summary: The seven Category 1 airports result in 90 percent of business centers being served within 60 minutes. With the addition of the six Category 2 airports, the coverage increases to 96 percent. The inclusion of Category 3 airports brings the total business center coverage to 98 percent. All of the business centers not served are marginally outside the 60 minute surface travel time.

Additionally, all large business centers, those with 10,000 or more employees, are served by the airports with scheduled air service.

Serve Significant Tourism/Convention Centers

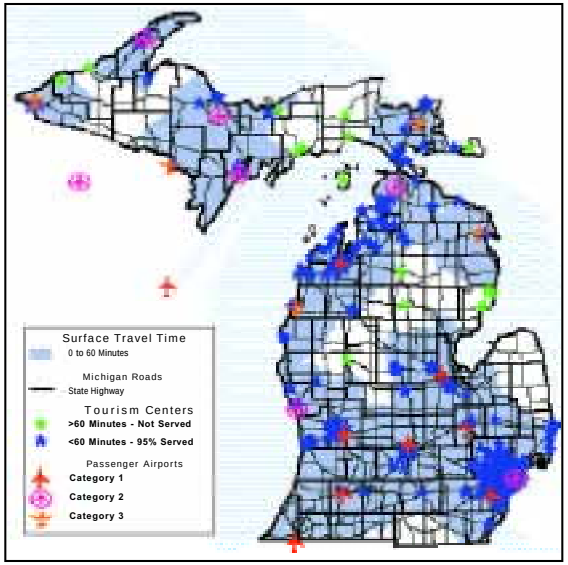
Goal: Assure the appropriate distribution of air service that adequately responds to critical and essential tourism/convention center needs.

Background: Tourism and convention centers in Michigan are identified by allocating lodging use taxes generated in each county to the travel analysis zones (TAZ) within that county based on TAZ employment as a percent of total county employment. TAZs with $30,000 or more of annual lodging use tax generated, as reported to the Michigan Department of Treasury, are designated as tourism/convention centers. Currently, there are 293 tourism/convention centers in Michigan. Generally, these centers are located in or near major urbanized areas like Detroit, Grand Rapids, and Lansing, or somewhat concentrated in the northwestern parts of the lower peninsula and eastern portions of the upper peninsula.


Muskegon, Muskegon County Airport

Service Standards: Tourism/convention centers standards relate to proximity of an airport with scheduled air service to a tourism/convention center and the performance target percent for tourism/convention centers to be served by those airports.

The Statewide Travel Demand Model is the analytical tool used to determine the proximity of airports to tourism/convention centers. This tool was used to determine the service area coverage of airports with scheduled air service and the number and size of tourism/convention centers served by the airports. In summary, tourism/convention centers in Michigan should be served within 60 minutes surface travel time by airports with scheduled air service.



Goal Achievement Summary: The seven Category 1 airports result in 74 percent of tourism/convention centers being served within 60 minutes. With the addition of the six Category 2 airports, the coverage increases to 90 percent. The inclusion of Category 3 airports brings the total tourism/convention center coverage to 95 percent. All of the tourism/convention centers not served are marginally outside the 60 minute surface travel time.

Population Centers

Goal: Assure the appropriate distribution of air service that adequately responds to population center needs.

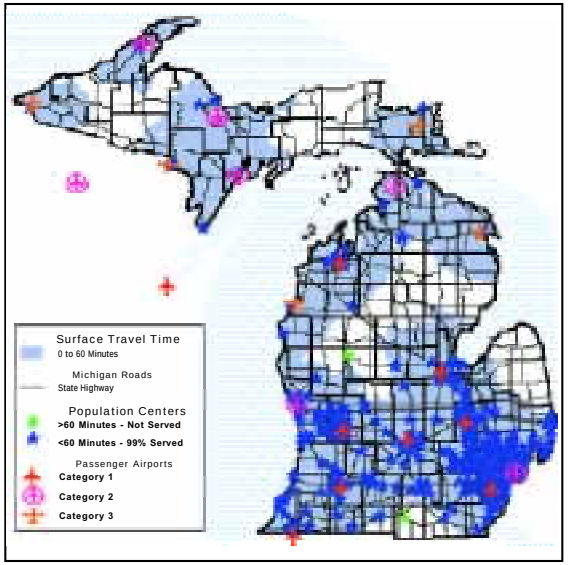
Background: Population centers are defined as a minor civil division (MCD) of 5,000 or more people with a population density of 250 or more per square mile. In 1995, there were 246 population centers meeting this criteria. The 2020 forecast predicts there will be 295 population centers meeting this criteria.

Service Standards: The population centers standard relates to the proximity within 60 minutes of an airport with scheduled air service to a population center and the 95 percent service threshold.

As previously described, the Statewide Travel Demand Model is the analytical tool used to determine the proximity of airports to population centers. This tool was used to determine the service area coverage of all candidate airports and the number and size of population centers served by the airports. In summary, population centers in Michigan should be served within 60 minutes surface travel time by airports with scheduled air service.

Goal Achievement Summary: The seven Category 1 airports result in 88 percent of population centers being served. With the addition of the six Category 2 airports, the coverage increases to 96 percent. The inclusion of Category 3 airports brings the total population center coverage to 99 percent. Both of the population centers not served are marginally outside the 60 minute surface travel time.

Flint, Bishop International Airport



General Population Access

Goal: Assure the appropriate distribution of air service to support quality of life for Michigan residents and visitors by providing access to the national air transportation system.

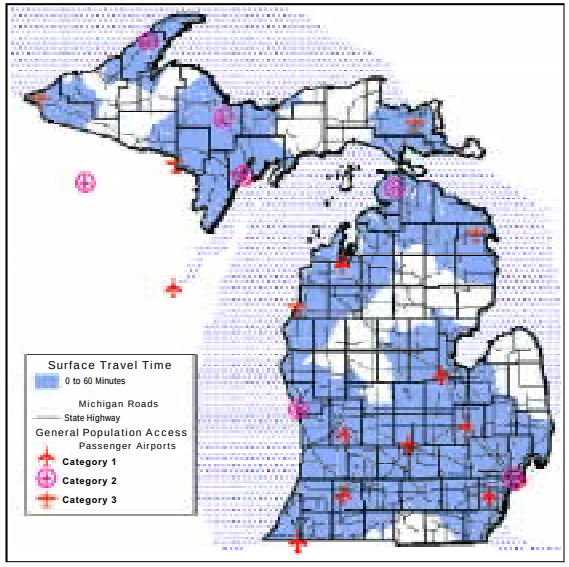
Background: Access to basic air transportation services for all Michigan residents and visitors is important.

Service Standards: General population access standards relate to proximity of an airport with scheduled air service to the general population and the performance target percent for general population access to be served by those airports.

The Statewide Travel Demand Model is the analytical tool used to determine the proximity of airports to the general population. This tool was used to determine the service area coverage of all candidate airports and the population served by the airports. In summary, the general population access standard in Michigan is met by a maximum 60-minute surface travel time to airports with scheduled air service.

Goal Achievement Summary: The seven Category 1 airports result in 88 percent of the general population being served within 60 minutes. With the addition of the six Category 2 airports, the coverage increases to 93 percent. The inclusion of Category 3 airports brings the total general population coverage to 96 percent within 60 minutes of an airport with scheduled air service.

Detroit, Detroit Metropolitan - Wayne County International Airport



STATE LONG RANGE PLAN

The State Long Range Plan (SLRP) is a policy-oriented document, required by federal law, which guides transportation investment decisions and strategies through the year 2025, not just at the state level but for local transportation providers as well. It is intended to be precise enough to establish and support transportation goals, yet flexible enough to accommodate the rapidly changing transportation demands of our modern world.

The SLRP is an MDOT initiative, consistent with federal legislation, and directed by a customers and providers advisory group. The plan is intermodal in scope including aviation, highways, and the other transportation modes. Eight goals constitute the heart of the SLRP. They address all aspects of the transportation system and its impacts on the people, the land, and the environment.

STATE LONG RANGE PLAN GOALS

The eight SLRP goals are as follows:

Transportation Services Coordination

Create incentives for coordination between public officials, private interests and transportation agencies to improve safety, enhance or consolidate services, strengthen intermodal connectivity, and maximize the effectiveness of investment for all modes by encouraging regional solutions to regional transportation problems.

Land Use Coordination

Coordinate local land use planning, transportation planning and development to maximize the use of existing infrastructure, increase the effectiveness of investment, and retain or enhance the vitality of the local community.

Basic Mobility

Work with the general public, public agencies and private sector organizations to ensure basic mobility for all Michigan citizens by, at a minimum, providing safe, effective, efficient and economical access to employment, educational opportunities and essential services.

Preservation

Within the constraints of state and federal law, direct investment in existing transportation systems to effectively provide safety, mobility, access, intermodal connectivity, or support economic activity and the viability of older communities, and ensure that the facilities and services continue to fulfill their intended functions.

Intermodalism

Improve intermodal connections to provide "seamless" transportation for both people and products to and throughout Michigan.

Environment and Aesthetics

Provide transportation systems that are environmentally responsible and aesthetically pleasing.

Strengthening the State's Economy

Provide transportation infrastructure and services that strengthen the economy and competitive position of Michigan and its regions for the 21st century.

Safety

Promote the safety and security of the transportation system for users and passengers, pedestrians and motorized and non-motorized vehicles.

RELATIONSHIP BETWEEN THE POLICY PLAN FOR MICHIGAN AIR SERVICE AND THE STATE LONG RANGE PLAN

The PPMAS is closely aligned with the SLRP. The PPMAS contains at least one policy addressing each of the SLRP goals. Just as the SLRP provides a framework for moving from the policy to the plan to the program to the project, so the PPMAS is intended to impact programming decisions regarding Michigan air service. Just as the SLRP stresses the importance of developing and justifying programs that are performance based, so the PPMAS places a strong emphasis on performance based programming. Just as the SLRP encourages use of state-of-the-art techniques such as the Transportation Management System (TMS), relevant web sites, and geographic information systems (GIS), so the PPMAS features use of these same state-of-the-art techniques.

POLICY PLAN GOALS

The PPMAS Steering Committee addressed a wide variety of air service issues, resulting in the following air service goals and subgoals:

1.0 TRANSPORTATION SERVICE COORDINATION

Encourage coordination among airport sponsors, service providers, and governmental agencies to enhance or consolidate services, strengthen intermodal connectivity, and maximize the market effectiveness and self sufficiency of air services provided. Where appropriate, look for regional solutions to regional air transportation service needs.

1.1 Promote cooperation between airport officials and local, regional, state and federal officials, including transportation and other agencies, such as economic development organizations, chambers of commerce, colleges and universities, to secure improvements to both airport infrastructure and air carrier services.

MDOT response: Identify opportunities for cooperation among affected parties in securing necessary infrastructure and services.

1.2 Promote cooperation between airport officials and surface transportation services that complement commercial air services, such as car rental, taxi service, public transportation, passenger parking, etc.

MDOT response: Work with local airport officials to promote or increase awareness of services available and help assure appropriate levels of service are attained to meet customer needs.

1.3 An airport service area is the geographical area from which the airport draws the vast majority of its passengers. Airport location, the quantity, and quality of air service are the main determinants of the size of an airport's geographical service area. Those areas of the state (business centers, tourism/convention centers and others) requiring access to the national air transportation system should be adequately served by Michigan air carrier airports.

MDOT response: Establish appropriate target service standards for business centers, tourism/convention centers, population centers, isolation, etc. These target service standards should address . . .

- *Maximum surface travel time (drive time)*
- *Minimum service level (number of hub flights)*
- *Performance target*

1.4 Where feasible, it is desirable to have competition among carriers at Michigan airports.

MDOT response: Implement an air carrier recruitment program based on market analysis. Measure customer satisfaction through periodic benchmarking of those services.

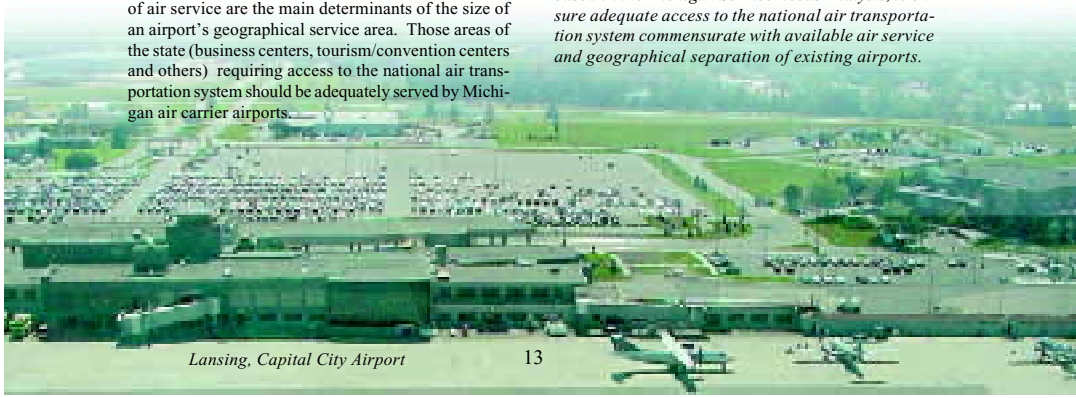
1.5 Recognizing that airlines desire to serve the most profitable markets, competition among airports for these services is dependent upon . . .

- Ticket yield
- Business vs discretionary market
- Existing airline competition
- Seasonality of demand
- Regional airport potential

MDOT response: Ensure air carrier recruitment/retention efforts reflect that airline service decisions are economically driven. Consideration for risk-sharing projects, temporary in nature, must be predicated on thorough financial feasibility analysis taking into account results of market (demand) analysis.

1.6 Regionalization of air services will continue to be economically (airline) driven.

MDOT response: Partner with eligible communities, based on the Michigan Service Needs Analysis, to ensure adequate access to the national air transportation system commensurate with available air service and geographical separation of existing airports.



Lansing, Capital City Airport

1.7 Scheduled/coordinated surface transportation can be used to provide access to, supplement, or be a substitute for, locally available air services.

MDOT response: Encourage local public transportation and/or private entities to provide well timed, coordinated surface transportation to/from nearest available air services. To enhance airport access, identify and work with appropriate agencies to secure needed roadway improvements.

1.8 Charter services, in some instances, can provide an effective complement or limited competition to scheduled air service in select markets. This can be in lieu of attempting to introduce new scheduled air carrier services in markets with periodic or limited demand.

MDOT response: Based on market analysis, encourage local communities to promote charter services which can augment existing scheduled airline services in response to identified demand.

1.9 Ensure that MDOT participation in funding Air Service Program projects will not place one or more carriers or airports at an unfair advantage or disadvantage with its competitors.

MDOT Response: Applications for Air Service Program grants will be reviewed for competitive implications in accordance with state Air Service Program guidelines.

2.0 LAND USE COORDINATION

Coordinate local land use planning, transportation planning, airport planning and zoning, and development to maximize and protect the use of the existing infrastructure, promote compatible land use, retain or enhance the vitality of the local community, and maintain community livability.

2.1 Encourage appropriate land use controls around airports to ensure that the airport is a safe, acceptable and viable element of the community.

MDOT response: Ensure land use compatibility by tall structure review, providing model zoning ordinances, and offering appointment of an MDOT representative to appropriate local airport zoning boards.

2.2 Promote responsible aircraft operations based on existing adjacent land uses to minimize noise impact on the community.

MDOT response: Encourage noise studies and mitigation efforts at airports to identify measures that may reduce noise exposure for the community.

2.3 Recognize that economic (re)development of areas on or near air carrier airports can result in enhanced air service.

MDOT response: Partner with airports, state and local agencies to encourage compatible development of properties on or near air carrier airports (renaissance zones, industrial parks) for potential economic benefit to the community.

3.0 BASIC MOBILITY

Work with agencies and service providers to ensure basic mobility for all Michigan citizens and visitors by encouraging the provision of air services that respond to business, tourism/convention, population center, and general population travel needs.

3.1 Promote air service that responds to the needs of …

- Business centers
- Tourism/convention centers
- Population centers
- General population

MDOT response: Air service recruitment/retention projects will be used in conjunction with the Michigan Service Needs Analysis to promote and secure improved air service where appropriate.

3.2 Improve Essential Air Service (EAS) to communities in Michigan.

MDOT response: Work with the USDOT using the Michigan Service Needs analysis to promote and secure improved air service, where appropriate. Air Service Program projects may also be utilized.

3.3 Cooperate with public agencies and airport sponsors to ensure people with specialized transportation needs such the elderly and those defined in the ADA, can effectively access the air service system.

MDOT response: Capital Improvement and Equipment projects will continue to address Air Service Program goals to maintain air carrier airport compliance with applicable federal ADA laws.

3.4 Monitor quality of service indicators such as number of departures, departure times (recognizing that capacity at hub airports and connecting flight schedules, i.e. "banks" can be limiting factors), enplanements, seat availability, etc., at air carrier airports.

MDOT response: Review, update, and continue to monitor air service indicators. MDOT will continue to work with the airport and airline to address issues related to quality and quantity of service.

4.0 PRESERVATION

Work with local sponsors to preserve airport infrastructure and air services that respond to business, tourism/convention, population center, and general population travel needs.

4.1 Maintain and improve existing aviation facilities and services according to service standards.

MDOT response: MDOT/USDOT programs will be used to secure critical infrastructure improvements for air carrier airports in accordance with the MASP 2000. Work with USDOT and local partners to maintain existing services and, where appropriate, secure service improvements.

5.0 INTERMODALISM

Promote intermodal interfaces with air carrier airports to ensure seamless transportation for people and products throughout Michigan and the world.

5.1 Strengthen intermodal connectivity for appropriate rail, bus/transit, and roadway access.

MDOT response: Encourage cooperation among state, local and/or private entities to provide surface transportation options and necessary infrastructure to access air carrier airports. Identify where intermodal improvements are needed.

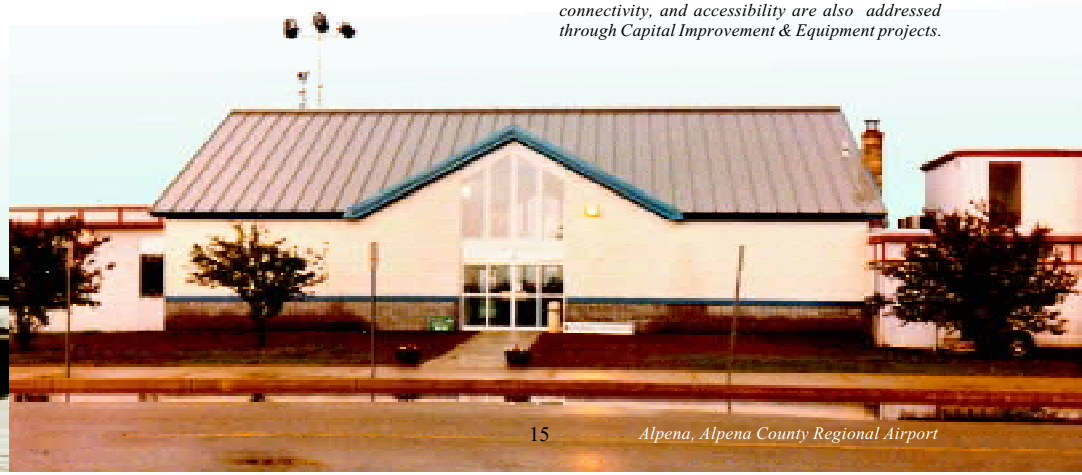
6.0 ENVIRONMENT AND AESTHETICS

Promote airport facilities and operations that are environmentally responsible and aesthetically pleasing.

6.1 Promote airport facilities that enhance passenger convenience and acceptance.

- Parking, signage, and landscaping improvements
- Terminal improvements (both structural and nonstructural enhancements)
- Boarding bridges
- Safety improvements (lighting and security screening)

MDOT response: Recognizing that a positive airport experience is important to the flying public and is often the traveler's first impression of the community, work to enhance passenger conveniences at air carrier airports. Improvements which increase safety, connectivity, and accessibility are also addressed through Capital Improvement & Equipment projects.



7.0 STRENGTHENING THE STATE'S ECONOMY

Promote air carrier airport services that strengthen the economy and competitive position throughout Michigan.

7.1 Promote air carrier services through an MDOT/AERO interactive web page. Assist air carrier airports in developing local airport web sites.

MDOT response: MDOT will maintain an updated, interactive web page for aviation, with links to airport web sites. MDOT's Airport Awareness projects will continue to assist air carrier airports in establishing web sites.

7.2 Promote community support of local air services by ...

- ✈ Encouraging community usage of their airport and the airlines providing service. By utilizing local services, a community is better positioned to retain and/or expand these services.
- ✈ Facilitating communication among the airline, local officials and airport management. State may function as a liaison (ombudsman) on behalf of smaller airports.
- ✈ Recognizing that various kinds of customers (business, discretionary, etc.) have different needs.

MDOT response: Working through local sponsors, continue to promote scheduled air service and other airport services at eligible air carrier airports using Airport Awareness projects. This may include developing tools to assist in educating citizens regarding airline industry dynamics and the importance of using local air services. MDOT's Air Service Section will continue to maintain contact with airlines to address issues on behalf of air carrier airports.

7.3 Assist airport sponsors in disseminating information on the services available at their airports to help travelers make informed decisions.

MDOT response: Working through local sponsors, continue to promote scheduled air service and other airport services at eligible air carrier airports using Airport Awareness projects. MDOT's Air Service Section will continue to maintain contact with airlines to address issues on behalf of air carrier airports.

8.0 SAFETY

Promote safety and security of air carrier airport passengers, services, and infrastructure.

8.1 Partner with airport sponsors in providing safe, secure, and unobstructed access to terminal facilities and services.

MDOT response: Capital Improvement and Equipment projects will continue to address goals to bring all air service airports into compliance with applicable federal laws and industry-accepted practices.

8.2 Partner with airport sponsors in enhancing the safety of airport operations.

MDOT Response: Fund Capital Improvement and Equipment projects to implement important safety enhancement projects when other funding is unavailable.

Traverse City, Cherry Capital Airport

CONCLUSIONS

Air service affects local economies, demographics, and business locations.

The PPMAS process has defined the public role in this highly visible form of public transportation operated by the private sector for profit.

Consistent with Policy Plan Development Considerations, PPMAS examined air service industry dynamics including Michigan Service Needs.

The PPMAS identifies those areas where the Michigan Department of Transportation has an opportunity to positively affect the provision and use of air services throughout Michigan.

PPMAS, adopted by the Michigan Aeronautics Commission in March 2001, will be used by MDOT to modify the Air Service Program, as appropriate, to implement PPMAS initiatives.

Policy Plan Development Considerations

- ✈ Assure the appropriate distribution of air service to support and promote economic development statewide.
- ✈ Assure the appropriate distribution of air service to support quality of life for Michigan residents and visitors by providing access to the national air transportation system.
- ✈ Match a community's air service to the level which it can profitably support.

As an outcome of the PPMAS process, three overall policies have been established. These are …

1. The 18 Michigan airports with scheduled air service are geographically well situated and meet Michigan Service Needs within the service threshold of 60 minutes or less surface travel time without the need to add additional airports. This will be monitored to ensure that needed future demand at individual airports is reasonably accommodated.

2. Although the 18 Michigan airports with scheduled air service are geographically well situated and meet Michigan Service Needs, some airports have deficiencies in meeting the policy plan consideration of matching the community's air service to the level which it can profitably support. Therefore, steps will be taken to retain and/or improve quality air service at selected, existing airports to meet specific travel demands integral to business, tourism/convention, and population center needs.

3. To continue to meet PPMAS goals, scheduled air service at the 18 Michigan air service airports should be retained, working within available resources.

These policies establish the parameters that will shape MDOT's response to Michigan Air Service Needs in the future. This response will be accomplished by appropriately focusing available MDOT staff and financial resources to attain the goals set forth in this document. Measurement of customer satisfaction will occur through periodic benchmarking of Michigan air service.

An Avro Regional Jet Airliner

APPENDIX - Airport Service Description As of February 1, 2001

Airport	Weekly Hub Departures	Air Carrier(s)	Hub(s) Served	Aircraft Code(s)	Seating Capacity
Category 1 Airports					
Detroit Metro	>4,300	America West			
		American			
		American Trans Air			
		British Airways			
		Continental			
		Continental Express			
		Delta			
		Delta Connection (ASA)			
		Delta Connection (Comair)			
		KLM Royal Dutch Airlines			
		Lufthansa			
		Northwest			
		Northwest Airlink (Mesaba)			
		Southwest			
		Spirit			
		Sun Country			
		Trans World Airlines			
		United Airlines			
		United Express (Atlantic Coast)			
		US Airways			
		US Airways Express			
Flint	159	Air Tran	ATL	DC9	109
		Midwest Express Connection (Skyway)	MKE	B1900, FRJ	19, 32
		Northwest	DTW	DC9	122
		Northwest Airlink (Mesaba)	DTW, MSP	SF3, ARJ	30 or 34, 69
		US Airways Express (Chautauqua)	PIT	D38, SF3	30
Grand Rapids	518	Air Georgian	YYZ	B1900	18
		American Eagle	DFW, ORD	ERJ	37 or 50
		ATA Connection (Chicago Express)	MDW	SF3	30 or 34
		Continental Express	CLE	ER3	37
		Delta Connection (Comair)	CVG	CRJ	50
		Midwest Express Connection (Skyway)	DCA, MKE	FRJ, B1900	32, 19
		Northwest	DTW, MSP, MEM	A320, DC9, 727	150, 122, 149
		Northwest Airlink (Mesaba)	DTW, MSP, MEM	ARJ	69
		TW Express (Trans States)	STL	J41	29
		United	ORD	B727, B737	147, 126
		US Airways	PIT	F100	97
		US Airways Express (CCair)	PIT	ERJ	37 or 50
Kalamazoo	206	American Eagle	ORD	ERJ	37 or 50
		Continental Express	CLE	B1900	19
		Delta Connection (Comair)	CVG	CRJ	50
		Northwest	DTW, MSP	DC9	100
		Northwest Airlink (Mesaba)	DTW, MSP	SF3, ARJ	30 or 34, 69
		United Express (Air Wisconsin)	ORD	D38, CRJ	30, 50
		US Airways Express (PSA)	PIT	D38	30

Consult the airline's published schedules for flight information and seating capacity.

Airport	Weekly Hub Departures	Air Carrier(s)	Hub(s) Served	Aircraft Code(s)	Seating Capacity
Category 1 Airports (Continued)					
Lansing	219	Continental Express	CLE	B1900, ATR	19, 46
		Delta Connection (Comair)	CVG	CRJ	50
		Midwest Express Connection (Skyway)	MKE	B1900	19
		Northwest	DTW, MSP	DC9, B727	122, 149
		Northwest Airlink (Mesaba)	DTW	SF3	30 or 34
		United Express (Great Lakes)	ORD	EM2	30
		US Airways Express (Chautauqua)	PIT	SF3	30 or 34
Saginaw	145	Continental Express	CLE	B1900	19
		Northwest	DTW, MSP	DC9	122
		Northwest Airlink (Mesaba)	DTW, MSP	SF3, ARJ	34, 69
		United	ORD	B737	126
		US Airways Express	PIT	B1900	19
Traverse City	129	American Eagle	ORD	ERJ	37 or 50
		Midwest Express Connection (Skyway)	MKE	B1900	19
		Northwest	DTW	DC9	122
		Northwest Airlink (Mesaba)	DTW, MSP	SF3	30 or 34
		United Express (Great Lakes)	ORD	B1900	19
Category 2 Airports					
Detroit City		Airport is considered Category 2 based upon summer 2000 air service. Service recruitment was in process as of February 2001.			
Escanaba	39	Midwest Express Connection (Skyway)	MKE	B1900	19
		Northwest Airlink (Mesaba)	DTW	SF3	30 or 34
Houghton/Hancock	40	Northwest Airlink (Mesaba)	MSP, DTW	SF3	30 or 34
Marquette/Sawyer	66	Midwest Express Connection (Skyway)	MKE	B1900	19
		Northwest Airlink (Mesaba)	DTW, MSP	SF3	30 or 34
Muskegon	63	Midwest Express Connection (Skyway)	MKE	B1900	19
		Northwest Airlink (Mesaba)	DTW	SF3	30 or 34
		United Express (Great Lakes)	ORD	B1900, EM2	19
Pellston	27	Northwest Airlink (Mesaba)	DTW, MSP	SF3	30 or 34
Category 3 Airports					
Alpena	21	Northwest Airlink (Mesaba)	DTW	SF3	30 or 34
Iron Mountain	18	United Express (Great Lakes)	ORD	EM2	30
Ironwood	12	United Express (Great Lakes)	ORD	B1900	19
Manistee	12	United Express (Great Lakes)	ORD	B1900	19
Sault Ste. Marie	21	Northwest Airlink (Mesaba)	DTW	SF3	30 or 34

APPENDIX INDEX

Airport ID	City Served
ATL	Atlanta
CLE	Cleveland
CMH	Columbus
CVG	Cincinatti
DCA	Washington DC
DFW	Dallas
DTW	Detroit (Metro)
MDW	Chicago (Midway)
MEM	Memphis
MKE	Milwaukee
MSP	Minneapolis
ORD	Chicago (O'Hare)
PIT	Pittsburgh
STL	St. Louis
YYZ	Toronto (Pearson Int'l)

Aircraft Code	Type
A320	**Airbus A320**
ARJ	**Avro Regional Jet**
AT7	ATR 72
ATR	ATR 42
B1900	Beech 1900
B727	**Boeing 727**
B737	**Boeing 737**
CRJ	**Canadair Regional Jet**
D38	Fairchild Dornier 328
DC9	**McDonald Douglas DC9**
EM2	Embraer 120
ER3	**Embraer Regional Jet 135**
ER4	**Embraer Regional Jet 145**
ERJ	**Embraer Regional Jet 135 or 145**
F100	**Fokker F100**
FRJ	**Fairchild Regional Jet**
J31	Jetstream J31
J41	Jetstream J41
MD80	**McDonald Douglas MD80**
SF3	Saab 340

Jet aircraft in bold, all others are turboprop